



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,863	02/11/2004	Klaus J. Oberlaender	20658/0203685-US0	6109

38881 7590 12/29/2006  
DICKSTEIN SHAPIRO LLP  
1177 AVENUE OF THE AMERICAS 6TH AVENUE  
NEW YORK, NY 10036-2714

EXAMINER.
-----------

DO, THUAN V

ART UNIT	PAPER NUMBER
----------	--------------

2825

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/777,863

Applicant(s)

OBERLAENDER ET AL.

Examiner

Thuan Do

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-14 is/are allowed.
- 6) ☒ Claim(s) 15,16,27-31 and 39-41 is/are rejected.
- 7) ☒ Claim(s) 17-26 and 32-38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/22/2006</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. This non-final office action is for the application dated 02/11/2004. Claims 1-41 are pending.

### ***Objection***

Claim 37 is a system claim and is suggested to change the dependency to claim 31 instead of 23. Correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 15,16,27-31,39-41 are rejected under 35 U.S.C. 102(b) as being unpatentable over the prior art of Okumura et al. Pat. No. 5974493.

**Regarding claim 15:** The prior art teaches a method comprising:  
selecting a plurality of memory components for the embedded processor (col. 3, lines 19-25);  
configuring the memory components (col. 1, lines 8-12); and  
generating the memory components, wherein each memory component has a same width as the processing core (col. 2, lines 23-39 and figure 5 using the same width of memory modules 31,32 and CPU 34).

Claim 30 is a system claim for similar features and rejected in rationale.

**Regarding claim 16:** The prior art teaches a method with adjacent (Fig. 5, boxes 31,32,34. This area is also used to reject claim 31).

**Regarding claim 27:** The prior art teaches a method with selecting process of memory size (col. 14, lines 23-35. This area is also used to reject claim 39).

**Regarding claims 28,29:** The prior art teaches a method with memories (Fig. 11. This area is also used to reject claims 40,41).

3. Claims 15,30 are rejected under 35 U.S.C. 102(b) as being unpatentable over Yamaoka et al. article provided by applicant's IDS with the title of A 12-ns 8-Mbyte DRAM Secondary Cache for a 64-bit Microprocessor dated 08/23/2001.

selecting a plurality of memory components for the embedded processor (page 5, V. Implementation paragraph);

configuring the memory components (Figure 10); and

generating the memory components, wherein each memory component has a same width as the processing core (Figure 10 with MPU processor and DRAM have the same width).

Claim 30 is a system claim for similar features and rejected in rationale.

#### ***Allowable Subject Matter***

Claims 17-26,32-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for allowance is that the prior art of record does not teach the dependent claims with all other features of the corresponding independent claims.

#### ***Allowable Subject Matter***

Claims 1-14 allowed. The reason for allowance is that the prior art of record fails to teach the combination of all features of independent claim.

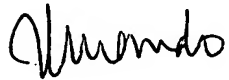
#### **CONTACT INFORMATION**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan Do whose telephone number is 571-272-1891. The examiner can normally be reached on Monday-Friday 8:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone numbers for proceeding this application is 571 273-8300.

Art Unit: 2825

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 800-786-9199.

A handwritten signature in black ink, appearing to read 'Thuan Do', with a stylized, cursive script.

Thuan Do  
Primary examiner  
12/18/2006